

REMARKS

Claims 1, 3-10 are pending in the application. Claim 11 is cancelled by this response.

Claims 1, 3-9 and 11 were objected to because of certain informalities in claims 1, 4, 6 and 11. Appropriate corrections are made to claims 1, 4 and 6 are now made and therefore the Examiner is requested to withdraw the objection. The objection raised with respect to claim 11 is now moot because claim 11 is now cancelled.

With respect to claim rejections, claims 1, 3, 6-7 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over the *Funada* reference in view of *Uno et al.* and *Schaede*. Claims 4, 5, and 9, 10 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Funada* in view of *Uno et al.* and *Schaede* as applied to claims 1, 3, 6 and 11 and further in view of *Giori*. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Funada* in view of *Uno et al.* and *Schaede* as applied to claims 1, 3, 6, 7, and 11 and further in view of *Reinhard et al.*

Applicant's independent claims 1, 6 and 10 are now amended to include the feature of the second delivery chain being located in relatively close proximity to a site above the delivery path, as shown in Figures 2 and 6. The second delivery chain extends along its entire length so as to

be parallel to a floor surface with the printing machine. In addition to the advantages stated in the response to the previous Office Action on December 9, 2003, this limitation offers the advantage that the printing machine is not upsized because the second delivery chain is located in relatively close proximity to the delivery path and is parallel to a floor surface of the printing machine and because the plurality of transport cylinders are arranged at a position lower than the second delivery chain.

Considering the references cited and applied, it is respectfully submitted that the *Funada* reference does not describe or suggest the claimed elements of the present invention, namely, a quality inspection apparatus, first and second delivery chains, and a plurality of transport cylinders located above the first delivery chain and below the second delivery chain nor does it disclose or suggest the aforementioned limitation that the second delivery chain is located in relatively close proximity to a site above the delivery path and extends along its entire length so as to be parallel to a floor surface of the printing machine.

With respect to *Uno et al.*, checking or inspection cylinders 12 and 13 are described. However, these inspection cylinders are placed upstream from a printing apparatus in a direction of transport of a sheet-like material. The machine disclosed in *Uno et al.* is a rotary printing press with an inspection function which inspects the acceptability of a printing product before printing by an additional

printing apparatus for numbering. It is submitted that *Uno et al.* discloses a printing machine of a type which is entirely different from the double-sided printing machine of applicant's claimed invention in which the opposite sides of a sheet-like material are inspected during a period from the printing of the opposite sides of the sheet-like material until delivery to the delivery pile.

Moreover, the two inspection cylinders in the *Uno et al.* reference are arranged in a zigzag fashion in a vertical direction so that the sheet-like material is received above the upper inspection cylinder 12, where it is then transported downward by the two inspection cylinders and transferred to the transport chain 20 below the lower inspection cylinder 13. Accordingly, the direction of the transport of the sheet-like material is inverted from that of the present invention in which the sheet-like material is transported upward during inspection. Thus the feature in applicant's claimed invention that the plural transport cylinders are provided along the path of upward transport of the sheet-like material is neither disclosed nor suggested by *Uno et al.* Furthermore, the presently added limitation to applicant's claimed invention where the second delivery chain is located in relatively close proximity to a site above the delivery path and extends along its entire length so as to be parallel to a floor surface of the printing machine is neither disclosed nor suggested.

Considering now the *Schaede* reference, while the feature of a plurality of transport cylinders are provided between the chain conveyors 13 and 47, the plurality of transport cylinders are not provided for the purpose of inspecting a sheet. Moreover, the plurality of transport cylinders in the *Schaede* reference are located above a delivery pile so that the chain conveyor is steeply curved upwards in a printing press. As a result, the undesired result of the machine becoming undesirably upsized occurs.

It is respectfully submitted that the *Schaede* reference neither discloses nor suggests the aforementioned feature of applicant's claimed invention that the second delivery chain is located in relatively close proximity to a site above the delivery path and extends along its entire length so as to be parallel to a floor surface of the printing machine and that the plurality of transport cylinders are arranged below the second delivery chain. Furthermore, *Schaede* does not disclose or suggest a first delivery chain passing below the ink supply means, a first transport cylinder, and a second transport cylinder.

Considering the *Giori* reference, this reference discloses an ultra-violet lamp 24 for drawing a sheet-like material transported by a cylinder 23. However, the reference neither describes nor suggests an inspection apparatus for inspecting both sides of the sheet-like material. Claims 4 and 5 as well as claims 9 and 10 of the present application are

characterized in that the first and second drying devices are arranged in a special positional relationship with respect to the inspection apparatus. This feature is neither described nor suggested by *Giori*.

It is respectfully submitted that applicant's claimed invention would not be obvious, even when *Giori* is combined with *Funada*, *Uno et al.* and *Schaede*, taken either singly or in combination.

Considering now *Reinhard et al.*, this reference discloses two transport cylinders 17 and 18 being arranged above a delivery pile, requiring a relatively large space above the delivery pile. In the present invention, on the other hand, a plurality of transport cylinders are disposed so as to be located above the first delivery chain and below the second delivery chain and wherein a sheet-like material is received from the first delivery chain below a plurality of transport cylinders, thereafter being transported upward by the plurality of transport cylinders and then transferred to the second delivery chain above the plurality of transport cylinders. This provides the advantage of permitting double-sided inspection of sheet-like material without requiring an increase in the installation space and the entire length of the printing machine.

Reinhard neither discloses nor suggests the presently added limitation to applicant's invention that the second delivery chain is located in a relatively close proximity to a site above the delivery path and extends along its entire length so as to be parallel to a floor surface

of the printing machine. Furthermore, *Reinhard* does not disclose or suggest the feature that the plurality of transport cylinders are arranged below the second delivery chain.

In summation, applicant's claimed feature that the second delivery chain is located in relatively close proximity to a site above the delivery path and extends along its entire length so as to be parallel to a floor surface of the printing machine as well as the plurality of transport cylinders being arranged below the second delivery chain, results in a relatively compact printing machine which does not increase in height nor is there an increased space required for installation.

It is respectfully submitted that none of the references taken either singly or in combination teach or suggest applicant's invention as now claimed, nor would such be obvious to one skilled in the art without impermissible hindsight provided by applicant's own disclosure.

Accordingly, independent claims 1, 6 and 10 are deemed to be in condition for allowance and dependent claims 3-5 and 7-9 are deemed to become allowable by virtue of their dependency from independent claims 1 and 6, respectively

Conclusion


In view of the above amendments and remarks, reconsideration of the rejections and allowance of the pending claims in the present application are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact William L. Gates (Reg. No. 20,848) at the telephone number of the undersigned to resolve any questions which remain in order to place the application in condition for allowance.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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